

REMARKS

The last Office Action has been carefully considered.

It is noted that claims 8-13 are rejected under 35 U.S.C. 102(b) over the U.S. patent to Gotz.

Claim 14 is rejected under 35 U.S.C. 103(a) over the U.S. patent to Gotz in view of the U.S. patent to Noto.

Also, the claims are objected to and rejected under 35 U.S.C. 112.

In connection with the Examiner's objection to claims 8 in paragraph one of the Office Action, claim 8 has been amended as required by the Examiner.

In connection with the Examiner's rejection of the claims under 35 U.S.C. 112 in paragraph 3 of the Office Action, applicant wishes to make the following remarks:

Claim 8 has been amended to define that a method is used for correcting a sensor system which is either an angle-measuring sensor

system, a distance-measuring sensor system, or an angle-and distance-measuring sensor system.

Also, the errors which are corrected are specified as either angle errors, or phase errors, or angle and phase errors.

As for the Examiner's questions how to obtain the correction parameters (m_1 , m_2), it is believed that this is immaterial for the present invention, and various steps can be used for this, for example as correctly pointed out by the Examiner on the paragraph bridging pages 6 and 7. However, any introduction of these steps into claim 8 should be considered as unnecessary limitations

Since claims 12-14 have been canceled, it and therefore the Examiner's grounds for rejection over these claims should be considered as no longer tenable.

After carefully considering the Examiner's grounds for the rejection of the claims over the art, applicant canceled claim 9 and amended claim 8 by incorporating into it the features of this claim. Applicant has also added dependent claim 15.

As mentioned herein above, claims 12-14 have been canceled, and some claims have been amended.

Before the analysis of the prior art, it is believed to be advisable first of all to explain to the Examiner the subject matter in the present invention.

In the inventive method for correcting a sensor system, a compensation (or calibration) process is performed, or in other words error parameters are determined, with which then during the use the determined measuring values can be corrected. In the prior art, in particular in the patent to Gotz applied by the Examiner against the claims, a so-called gradient process is used, or in other words an interactive process, in which the measuring value is corrected in small steps.

In the method in accordance with the present invention the following steps are performed:

In a so-called compensation (calibration) process four parameters x_0 , y_0 , m_1 and m_2 are determined. This in practice can be performed during the manufacture on the sensor as explained in the specification on pages 2-4. These four parameters are specific for each sensor and are stored for example in the sensor on a chip. These stored

parameters are used so that during the operation the determined measured value pairs (x_i, y_i) are corrected during the operation.

These stored parameters are used so that the measured value pairs (x_i, y_i) determined during the operation are corrected during the operation. In a correction process with the use of the four parameters x_0 , y_0 , m_1 and m_2 the corrected measured value pairs (x'_i, y'_i) are determined.

In contrast to this method, in the patent to Gotz six parameters x_c , x_d , y_c , y_d , x_0 and y_0 are determined, as disclosed in particular in column 5, starting from line 32. In the patent to Gotz there was the same problem. However, in this reference six parameters and not four parameters as in the applicant's invention are determined, and as a result a different, not simply transferable process is proposed. The significant difference can be clearly understood in the patent to Gotz from column 5, starting from line 18. Here the gradient process called also adaptation process, is described. In repeating turning loops, or in other words, step-by-step, the correct value is mathematically approximated. This requires much more time than in the so-called "direct process" in accordance with the applicant's invention. It can be clearly understood from claim 1 of the patent to Gotz, in column 7, starting from line 55.

The new features of present invention which are now defined in claim 8 are not disclosed in the patent to Gotz.

The original claims were rejected over this reference as being anticipated. In connection with this, it is believed to be advisable to cite the decision in *re Lindenman Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984) in which it was stated:

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim."

Definitely, the reference does not disclose each and every feature of the present invention which are now defined in claim 8.

Also, as explained herein above, the present invention provides for the highly advantageous results which can not be accomplished by the method disclosed in the reference.

It is well known that in order to support a valid rejection in the art must also suggest that it would accomplish applicant's results. This was stated by the Patent Office Board of Appeals, in the case *Ex parte Tanaka, Marushma and Takahashi* (174 USPQ 38), as follows:

Claims are not rejected on the ground that it would be obvious to one of ordinary skill in the art to rewire prior art devices in order to accomplish applicant's result, since there is no suggestion in prior art that such a result could be accomplished by so modifying prior art devices.

As for the patent to Noto applied by the Examiner, it also does not teach the new features of the present invention.

The present invention can not be considered as obvious from the references, since the references do not contain any hint or suggestion for the new features of the present invention. In order to arrive at the present invention from the references, the references have to be fundamentally modified, and in particular by introducing into them the new features of the present invention which are now defined in amended claim 8. However, it is known that in order to arrive at a claimed invention, by modifying the references cited art must itself contain a suggestion for such a modification.

This principle has been consistently upheld by the U.S. Court of Customs and Patent Appeals which, for example, held in its decision in *re Randol and Redford* (165 USPQ 586) that

Prior patents are references only for what they clearly disclose or suggest; it is not a proper use of a patent as a reference to modify its structure to one which prior art references do not suggest.

In view of the above presented remarks and amendments, it is believed that claim 8 should be considered as patentably distinguishing over the art and should be allowed.

As for the dependent claims, these claims depend on claim 8, they share its presumably

Reconsideration and allowance of the present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance; he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,

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